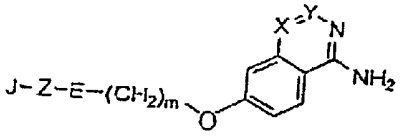
In the Claims

1. (Currently Amended) A serine protease inhibitor having the formula (I),

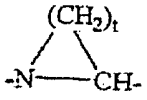


in which

J is H, R^1, R^1-O-C(O)-, R^1-C(O)-, R^1-SO_2-, R^3OOC-$(CHR^2)_p$-, $(R^{2a},R^{2b})N$-CO-$(CHR^2)_p$- or Het-CO-$(CHR^2)_p$-;

Z is an amino-acid of the formula -NH-CHR^1-C(O)-, -NR^4-$CH((CH_2)_qC(O)OR^1)$-C(O)-, -NR^4-$CH((CH_2)_qC(O)N(R^{2a},R^{2b}))$-C(O)-, -$NR^4$-$CH((CH_2)_qC(O)Het)$-C(O)-, D-1-Tiq, D-3-Tiq, D-Atc, Aic, D-1-Piq, D-3-Piq, ~~glutanyl~~ glutamyl or a (C_1-C_6) alkylester thereof;

E is -NR^2-CH_2- or the fragment



, which is unsubstituted or substituted with (1-6C)alkyl, (1-6C)alkoxy or benzyloxy;

R^1 is selected form (1-12C)alkyl, (2-12C)alkenyl, (2-12C)alkynyl, (3-12C)cycloalkyl and (3-12C)cycloalkyl(1-6C)alkylene, which groups are unsubstituted or substituted with (3-12C)cycloalkyl, (1-6C)alkoxy, oxo, OH, CF_3 or halogen, and

from (6-14C)aryl, (7-15C)aralkyl, (8-16C)aralkenyl and (14-20C)(bisaryl)alkyl, wherein the aryl groups are unsubstituted or substituted with (1-6C)alkyl, (3-12C)cycloalkyl, (1-6C)alkoxy, OH, CF_3 or halogen;

R^2, R^{2a} and R^{2b} are each independently selected from H, (1-8C)alkyl, (3-8C)alkenyl, (3-8C)alkynyl, (3-8C)cycloalkyl and (3-6C)cycloalkyl(1-4C)alkylene, which are unsubstituted or substituted with (3-6C)cycloalkyl, (1-6C)alkoxy, CF_3 or halogen, and from (6-14C)aryl and (7-15C)aralkyl, wherein the aryl groups are unsubstituted or substituted with (1-6C)alkyl, (3-6C)cycloalkyl, (1-6C)alkoxy, CF_3 or halogen;

R^3 is the same as R^2 or is Het-(1-6C)alkyl;

R^4 is H or (1-3C)alkyl;

X and Y are CH or N, with the proviso that they are not both N;

Het is a 4-, 5- or 6-membered heterocycle containing one or more heteroatoms selected from O, N and S;

m is 1 or 2;

p is 1, 2 or 3;

q is 1, 2 or 3;

t is 2, 3 or 4;

Tiq is 1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid;

Atc is 2-aminotetraline-2-carboxylic acid;

Aic is 2-aminoindan-2-carboxylic acid; and

Piq is 1-perhydroisoquinolyl carboxylic acid;

or a pharmaceutically acceptable addition salt or solvate thereof.

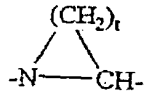
2. (Previously presented) The serine protease inhibitor according to claim 1, wherein m is 2; X is CH and Y is CH.

3. (Previously presented) The serine protease inhibitor according to claim 2, wherein

J is H, R^1 R^1-SO_2-, R^3OOC-$(CHR^2)_p$-, $(R^{2a},R^{2b})N$-CO-$(CHR^2)_p$- or Het-CO$(CHR^2)p$-;

Z is an amino-acid of the formula -NH-CHR^1-C(O)-, -NR^4-$CH((CH_2)_qC(O)OR^1)$-C(O)-, -NR^4-$CH((CH_2)_qC(O)N(R^{2a},R^{2b}))$-C(O)-, ;

E is -N(3-6C)cycloalkyl-CH_2- or the fragment



, which is unsubstituted or substituted with (1-6C)alkyl or 1-6C)alkoxy;

R^1 is selected from (1-12C)alkyl, (3-12C)cycloalkyl and (3-12C)cycloalkyl(1-6C)alkylene, which groups are unsubstituted or substituted with (3-12C)cycloalkyl, (1-6C)alkoxy or oxo, and from (6-14C)aryl, (7-15C)aralkyl and (14-20C)(bisaryl)alkyl, wherein the aryl groups are unsubstituted or substituted with (1-6C)alkyl, (3-12C)cycloalkyl, (1-6C)alkoxy, OH, CF_3 or halogen;

R^2 is H;

R^{2a} and R^{2b} are each independently selected from H, (1-8C)alkyl, (3-8C)cycloalkyl and (3-6C)cycloalkyl(1-4C)alkylene, which are unsubstituted or substituted with (3-6C)cycloalkyl or (1-6C)alkoxy and from (6-14C)aryl and (7-15C)aralkyl, wherein the

aryl groups are unsubstituted or substituted with (1-6C)alkyl, (3-6C)cycloalkyl, (1-6C)alkoxy, CF_3 or halogen;

R^3 is selected from H, (1-8C)alkyl, (3-8C)cycloalkyl and (3-6C)cycloalkyl(1-4C)alkylene, which are unsubstituted or substituted with (3-6C)cycloalkyl or (1-6C)alkoxy, and from (7-15C)aralkyl, wherein the aryl groups are unsubstituted or substituted with (1-6C)alkyl, (3-6C)cycloalkyl, (1-6C)alkoxy, CF_3 or halogen and from Het-(1-6C)alkyl;

p is 1;

q is 2;

t is 3 or 4.

4. (Previously presented) The serine protease inhibitor according to claim 3, wherein

Z is an amino-acid of the formula $-NH-CHR^1-C(O)-$ or glutamyl or an (1-6C)alkylester thereof;

R^1 is selected from (3-12C)cycloalkyl and (3-12C)cycloalkyl(1-6C)alkylene, which groups are unsubstituted or substituted with (3-12C)cycloalkyl or (1-6C)alkoxy, and from (6-14C)aryl, (7-15C)aralkyl and (14-20C)(bisaryl)alkyl, wherein the aryl groups are unsubstituted or substituted with (1-6C)alkyl, (3-12C)cycloalkyl, (1-6C)alkoxy or halogen; and

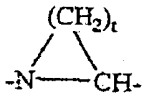
R^3 is selected from (1-8C)alkyl and (3-8C)cycloalkyl, which are unsubstituted or substituted with (3-6C)cycloalkyl or (1-6C)alkoxy, and from (7-15C)aralkyl, wherein the aryl groups are unsubstituted or substituted with (1-6C)alkyl, (3-6C)cycloalkyl, (1-6C)alkoxy, CF_3 or halogen and from Het-(1-6C)alkyl.

5. (Presently presented) The serine protease inhibitor according to claim 4, wherein

J is $-CH_2COO$(1-6C)alkyl, (3-8C)cycloalkyl, $-SO_2$-10-camphor, $-CH_2CONH$phenyl or $-CH_2CONH$(3-8C)cycloalkyl;

Z is D-cyclohexylalaninyl, D-phenylalaninyl, D-diphenylalaninyl or glutamyl, or an (1-6C)alkylester thereof; and;

E is the fragment



, wherein t is 3 or 4.

6. (Previously presented) A pharmaceutical composition comprising the serine protease inhibitor of claim 1 and at least one pharmaceutically suitable auxiliary.

7-9. (Cancelled)

10. (Previously presented) A method of inhibiting coagulation by serine proteases in the blood coagulation cascade in a mammal, comprising:

administering to the mammal an effective amount of a serine protease inhibitor according to claim 1.

11. (Previously presented) A method for treating a thrombin-mediated and thrombin-associated disease in a mammal, comprising:

administering an effective amount of the serine protease inhibitor according to claim 1.

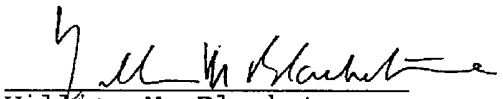
12. (Previously presented) The method according to claim 11, wherein the thrombin-mediated and thrombin-associated diseases are selected from the group consisting of deep vein thrombosis, pulmonary embolism, thrombophlebitis, arterial occlusion from thrombosis or embolism, arterial reocclusion during or after angioplasty or thrombolysis, restenosis following arterial injury or invasive cardiological procedures, postoperative venous thrombosis or embolism, acute or chronic atherosclerosis, stroke, and myocardial infarction.

13. (Previously presented) An anticoagulant composition, comprising:

the serine protease inhibitor according to claim 1.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2334 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17

Respectfully submitted,



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Attorney Docket No. O-98411 US